

Application No. 10/525,914
Paper Dated: July 15, 2010
In Reply to USPTO Correspondence of February 17, 2010
Attorney Docket No. 0388-050243

REMARKS

Claims 14-22 and 27-29 are pending. Claim 14 is amended. New claims 30 and 31 are added to set forth Applicants' patentably novel container stopper in varying scope. The indicated allowability of claims 14-22 and 27-29 is withdrawn in view of Yaniger, U.S. Patent No. 6,153,275 (hereinafter also referred to as "Yaniger").

I. Double Patenting Rejection:

Claims 14-22 and 27-29 stand provisionally rejected for nonstatutory obviousness-type double patenting in view of co-pending Application No. 10/588,593.

The Examiner has provisionally rejected all pending claims for nonstatutory obviousness-type double patenting in view of co-pending Application No. 10/588,593. Because Application No. 10/588,593 has not yet been taken up for examination, any actual double patenting issues will not arise until the present application issues as a patent and allowable subject matter is found in Application No. 10/588,593. Pursuant to MPEP § 804(I)(B), Applicants shall address any actual double patenting rejections in Application No. 10/588,593 upon the finding of allowable subject matter therein.

II. Rejection of Claims 14-22 and 27-29 Under 35 U.S.C. § 103(a):

Claims 14-22 and 27-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yaniger. Applicants respectfully traverse the rejection of claims 14-22 and 27-29 under 35 U.S.C. § 103(a) as being unpatentable over Yaniger and respectfully request reconsideration thereof. Claim 14 is amended to correct a spelling error. Support for the amendment to claim 14 is found in claim 14. Based on the foregoing, Applicants respectfully request admittance of the amendment to, and allowance of, claim 14.

Claims 15-22 and 27-29 are directly or indirectly dependent on claim 14. Applicants' patentably novel container stopper recited in claim 14 includes, among other things, a core formed of an elastic material and having a liquid-contact surface and an outer peripheral surface continuous with the liquid-contact surface, both the liquid-contact surface and the outer peripheral surface being coated with a skin made of a synthetic resin, e.g., but not limited to a

polyester resin or a synthetic resin having a polyester resin as a main component thereof. The skin is bonded to the core via a bonding layer. The bonding layer includes, but is not limited to, a core-side adhesion forming layer bonded to the liquid-contact surface and the outer peripheral surface, and a skin-side adhesion forming layer bonded to the skin. The skin is bonded to the core by thermal fusion of the core-side adhesion forming layer and the skin-side adhesion forming layer.

Consider now the container stopper disclosed in Yaniger. In the Yaniger container stopper, only the outer peripheral surface of the center core 130 (see Fig. 10 of Yaniger) (corresponding to the “core” in the present invention) is coated with the outer skin layer 150 (corresponding to the “skin” in the present invention). In the Yaniger container stopper, the outer skin layer 150 does NOT coat the liquid-contact surface of the center core 130.

According to Yaniger, the container (bottle) stopper is fabricated by cutting an appropriate length from a rod (see, e.g., Fig. 13) which was formed in a multi-layered construction through coaxial lamination by a continuous extrusion process of the center core 130, the second layer 140 and the outer skin layer 150 in this mentioned order (see column 6, lines 38-40 of Yaniger). With the container stopper thus fabricated, its cut sectional face forms the liquid-contact surface (the face to be inserted into the container). Namely, the liquid-contact surface formed as the cut sectional surface on each one of the axial opposed faces of the center core 130 is NOT coated with the outer skin layer 150.

Further, even if the liquid-contact surface of the center core 130 is to be coated with a certain “skin”, this is to be a skin different from the outer skin layer 150. Hence, in either case, the liquid-contact surface of the center core 130 of Yaniger is not to be coated with the outer skin layer 150. Based on the foregoing, Applicants respectfully submit that Yaniger does not describe or suggest the arrangement prerequisite in the construction of the present invention that both the liquid-contact surface of the core formed of an elastic material and the outer peripheral surface continuous with the liquid-contact surface are coated with a skin made of a synthetic resin.

On the other hand, the container stopper according to claim 14 of the present application has a construction suitable for use as a container stopper formed by using a core

which was cut to an appropriate size from the beginning. That is, in order to coat both the liquid-contact surface and the outer peripheral surface of the core with the synthetic resin skin and also to allow this skin to be firmly bonded to the entire liquid-contact surface and outer peripheral surface of the core, there is provided a core-side adhesion forming layer and there is also provided a skin-side adhesion forming layer, and these adhesion forming layers are thermally fused together. In this regard, no motivation for firmly bonding the skin to both the liquid-contact surface and the outer peripheral surface of the core is disclosed in Yaniger which forms the container stopper by forming the multi-layered rod first and then cutting this rod. Therefore, even with reference to the disclosure by Yaniger, the arrangement recited in claim 14 that both the liquid-contact surface of the core formed of an elastic material and the outer peripheral surface continuous with the liquid-contact surface are coated with a skin made of a synthetic resin would not have been obvious for one skilled in the art.

Moreover, the outer skin layer 150 used in the container stopper of Yaniger is not made of a polyester resin or a synthetic resin having a polyester resin as a main component thereof. Specifically, the outer skin layer 150 of Yaniger is formed by using a polyethylene resin such as ethylene-methacrylic acid copolymer resin (SURLYN), ethylene-vinyl acetate copolymer resin (ELVAX), etc. (see column 7, lines 37-40 of Yaniger), hence, being formed of a material completely different from the material forming the skin constituting the container stopper of the present invention. That is, in the case of the container stopper of claim 14 of the present application, the skin is made of a polyester resin, whereas, in the case of the container stopper of Yaniger, the outer skin layer 150 is made of a polyethylene resin. The problem resulting from a polyethylene resin being exposed to the content of the container is cited and discussed in the detailed disclosure of the present invention as a problem suffered by the conventional art (see page 2, lines 15-25 in the original detailed disclosure). This problem is not overcome at all by Yaniger. That is, the container stopper of Yaniger cannot possibly achieve the advantageous function/effect unique to the present invention, i.e., the effective prevention of intrusion of various kind of smells from the outside of the container and adverse effect to the content due to adsorption/desorption of the flavor of the content. Therefore, even with the knowledge of the Yaniger disclosure, one skilled in the art would NOT provide the arrangement of the container

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stopper recited in claim 14. More particularly, it would NOT have been obvious to one skilled in the art to provide a container stopper having the skin made of a polyester resin or a synthetic resin having a polyester resin as a main component thereof.

As discussed above, Yaniger does not describe or suggest at all the arrangement that both the liquid-contact surface of the core formed of an elastic material and the outer peripheral surface continuous with the liquid-contact surface are coated with a skin made of a synthetic resin or the further arrangement that the skin is made of a polyester resin or a synthetic resin having a polyester resin as a main component thereof. Hence, as described above, the container stopper of Yaniger and the container stopper of claim 14 significantly differ not only in the prerequisite construction of the container stopper, but also the material forming the skin for forming the surface which may contact the content in the container. Further, due to such constructional differences, only the container stopper of claim 14 of the present invention can achieve the unique advantageous function/effect of the effective prevention of intrusion of various kinds of smells from the outside of the container and adverse effect to the content due to adsorption/desorption of the flavor of the content. Consequently, even with reference to Yaniger, the construction of claim 14 of the present invention would not have been obvious for one skilled in the art.

For the reasons set forth above, Applicants respectfully submit that the subject matter of currently pending claim 14 is non-obvious over the cited Yaniger reference and the subject matter of claims 15-22 and 27-31 dependent therefrom is non-obvious over Yaniger as a matter of course.

Based on the foregoing, Applicants respectfully request withdrawal of the rejection of claims 14-22 and 27-29 under 35 U.S.C. § 103(a) as being unpatentable over Yaniger, and respectfully request allowance of claims 14-22 and 27-29.

III. New Claims

Applicants have added new claims 30 and 31. Support for claims 30 and 31 are found, among other places in the pending claims and on page 12, lines 12-18 of the original detailed disclosure.

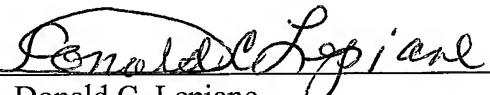
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The discussion above that patentably distinguishes claims 14-22 and 27-29 over Yaniger is applicable, among others, to patentably distinguish claims 30 and 31 over Yaniger. Further, claim 30 achieves the effect of making it possible to non-crystallize the skin under its stretched condition to the core in a firm manner. Moreover, there are achieved some additional effects such as, but not limited to, appropriate avoidance of the generation of "creases" that are NOT disclosed in Yaniger.

Based on the foregoing, Applicants respectfully request admission of, consideration of, and allowance of, new claims 30 and 31.

This Amendment represents a sincere effort to place this application in condition for allowance. In the event issues remain, the Examiner is invited to call the undersigned to discuss those issues before further action is taken on the case.

Respectfully submitted,
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